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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/758,302

01/11/2001

Jens Baltersee

1-1-1

9705

7590

03/18/2005

Docket Administrator (Rm. 3C-512)

Lucent Technologies Inc.

600 Mountain Avenue

P.O. Box 636

Murray Hill, NJ 07974-0636

EXAMINER

BOCURE, TESFALDET

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/758,302

Applicant(s)

BALTERSEE ET AL.

Examiner

Tesfaldet Bocure

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 13 is/are rejected.
- 7) ☒ Claim(s) 2-12 and 14-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on 10/27/04. These drawings are approved by the Examiner.
2. Figures 2,3 and 7 should be designated by a legend such as **--Prior Art--** because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Stated Own Prior art (figures 2 and 3).

4. Applicant's Stated Own Prior Art (ASOPA hereinafter) teaches a rake receiver (figs 2 and 3) having a plurality of branches having a detection path (see detection path in figures 2 and 4) and timing error detecting loop 12 having an early and late for correlator for detecting and correcting the timing of the received signals as in claims 1 and 13.

What ASOPA fail to teach is the summation signal generating unit in claims 2 and 13.

Such a summation signal generating unit in Rake receiver for summing a plurality copies of the received signals is widely known in spread spectrum communication system for coherently or non-coherently adding the signals using for example "maximal ratio combiner¹" to increase the signal-to-noise ratio of the received signals and Examiner is taking an official notice. Therefore, it would have been obvious to one of an ordinary skill in the art to sum the received signals in each finger at the time the invention was made.

Response to Arguments

5. In response to Applicant's argument that:

With respect to both the rejected claims 1 and 13, the office action states that the summation unit is not disclosed in the ASOPA, but that took official notice of the fact that such units were "known in spread spectrum communication system for coherently and non-coherently adding the signals to increase the signal-to-noise ratio of the received signals...

First, Applicants especially request the Examiner to show the basis of taking such official notice. M.P.E.P. 2144.03; See *In re Ahlez* 424 F.2d 1088, 1091, 165 U.S.P.Q. 418, 420-421 (CCPA 1970) ("assertions of technical facts in area of esoteric technology must always be supported by citation of some reference work" and "allegations concerning specific 'knowledge' of the art, which might be peculiar to a particular art should also be supported ")

Second, Applicant disagree with the characterization of the claims provide in the office action. For example, Claim 1 '(as amended) recites, at relevant part:

a summation unit communicatively coupled to said plurality of rake fingers for generating a summation signal based on the signals received from at least some of the rake fingers, said summation signal having an improved signal to noise ratio (SNR) if compared with the signal to noise ratio (SNR) of at least one of the rake fingers. ---

Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art is capable of instant and unquestionable demonstration as being well-known. As noted by the court in *re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute" (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA

¹ See cited references to Vijay K. Garg, "IS-95 CDMA and CDMA 200," to support for "common

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1961)). In Ahlert, the court held that the Board properly took judicial notice that "it is old to adjust intensity of a flame in accordance with the heat requirement." See also In re Fox, 471 F.2d 1405, 1407, 176 USPQ 340, 341 (CCPA 1973) (the court took "judicial notice of the fact that tape recorders commonly erase tape automatically when new audio information' is recorded on a tape which already has a recording on it").

As indicated in the office action with respect to the rejection of claims 1 and 13 above and as thought by the cited references, diversity (rake fingers/receivers) combining of a received signal such as maximal ratio combining is notorious known.

To mention few of the many patents disclosing the rake combiners, applicant is invited to refer to the cited references below.

Applicant is also advised to see a whole subclasses in 455/ 142+ and 375/144, 148 which deal with diversity receiver and rake receiver respectively having means for combining the received signal by calculating maximum signal-to-noise ratio.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent publication numbers USW 2002/0034218 to Papasakellariou et al. and Razzell and US 2002/0044592 and US patent numbers 6,456,653, 6,768,727 and 6,798,737 issued to Sayeed, Sourour et al and Dabak et al. and a book by the title "IS-95 CDMA and cdma 2000 to Vijay respectively disclose a

knowledge."

rake receiver having a combiner for combining the received plurality of spread spectrum signal according to the calculated signal-to-noise ration.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (703) 305-4735. The examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T.Bocure

Tesfaldet Bocure
Primary Examiner
Art Unit 2631

